

V. REMARKS

Claims 1-10 are rejected under 35 U.S.C. 103(a) as unpatentable over Kujirai et al. (U.S. Patent No. 5,555,739) in view of Taguchi (U.S. Patent No. 6,112,998). The rejection is respectfully traversed.

Kujirai teaches a cooler unit housing that is located in a passenger compartment near a dashboard of a motor vehicle. A piping arrangement of the cooler unit includes a pipe joint which is positioned at and supported by an opening of the dashboard. The pipe joint has a first face facing toward the passenger room and a second face facing toward the engine room. An expansion valve unit is connected to the first face of the pipe joint. Coolant inlet and output pipes are arranged with each having one end connected to an evaporator in the cooler unit housing and the other end led to the expansion valve unit. A grommet is disposed between a peripheral portion of the opening and an outer wall portion of the pipe joint thereby to establish sealing therebetween.

Taguchi discloses a thermostatic expansion valve that includes a housing, a plurality of passages, a temperature-sensing chamber, a valve mechanism, a spring biasing a ball valve and a slidable rod.

Claims 1 and 6, as amended, are directed to an expansion valve to be equipped in an air conditioner to control the flow of a refrigerant. Claims 1 and 6 recite that a piping member has a bore extending along a longitudinal axis and into but not completely through the piping member and having a first refrigerant path portion, a second refrigerant path portion and a third refrigerant path portion extending transversely to the longitudinal axis and in communication with the bore and a cassette unit inserted into the bore of the piping member. Claims 1 and 6 recite that the cassette unit includes a tube member having an interior surface defining a hollow interior of the tube member and at least a first through hole, a second through hole, a third through hole and a fourth through hole, a guide member, an orifice member and a plate member fixed to the interior surface of the tube member. Claims 1 and 6 also recite that the guide member

and a stopper are disposed apart from one another in a facially-opposing relationship to define, at least in part, a first refrigerant flow-through chamber of the tube member being in fluid communication with the first refrigerant path portion via the first and second through holes, that the guide member and the orifice member are disposed apart from one another in a facially-opposing relationship to define, at least in part, a second refrigerant flow-through chamber of the tube member being in fluid communication with the second refrigerant path portion via the third through hole and that the orifice member and the plate member are disposed apart from one another in a facially-opposing relationship to define, at least in part, a valve chamber in fluid communication with the third refrigerant path portion via the fourth through hole.

It is respectfully submitted that none of the applied art, alone or in combination, teaches or suggests the features of claims 1 and 6 as amended. Specifically, it is respectfully submitted that none of the applied art, alone or in combination, teaches or suggests a cassette unit that includes a tube member having an interior surface defining a hollow interior of the tube member and at least a first through hole, a second through hole, a third through hole and a fourth through hole as well as a guide member, an orifice member and a plate member fixed to the interior surface of the tube member. Also, it is respectfully submitted that none of the applied art, alone or in combination, teaches or suggests that the guide member and a stopper are disposed apart from one another in a facially-opposing relationship to define, at least in part, a first refrigerant flow-through chamber of the tube member being in fluid communication with the first refrigerant path portion via the first and second through holes, that the guide member and the orifice member are disposed apart from one another in a facially-opposing relationship to define, at least in part, a second refrigerant flow-through chamber of the tube member being in fluid communication with the second refrigerant path portion via the third through hole and that the orifice member and the plate member are disposed apart from one another in a facially-opposing relationship to define, at least in part, a valve chamber in fluid communication with the third refrigerant path portion via the fourth through hole.

Thus, it is respectfully submitted that one of ordinary skill in the art would not be motivated to combine the features of the applied art because such combination would not result in the claimed invention. As a result, it is respectfully submitted that claims 1 and 6 are allowable over the applied art.

Claims 2-5 depend from claim 1 and include all of the features of claim 1. Claims 7-10 depend from claim 6 and include all of the features of claim 6. Thus, it is respectfully submitted that the dependent claims are allowable at least for the reasons the independent claims are allowable as well as for the features they recite.

For instance, claims 5 and 10 recite that the guide member, the orifice member and the plate member are crimped to the tube member.

Withdrawal of the rejection is respectfully requested.

It is respectfully requested that the Examiner please note that Applicants amend claims 5 and 10 by changing "caulked" to "crimped". It is respectfully submitted that Applicants believe claims 5 and 10 are more clearly defined for the Examiner's understanding. Applicants do not believe that new matter is being introduced by these amendments because "crimping" is illustrated in the drawing figures.

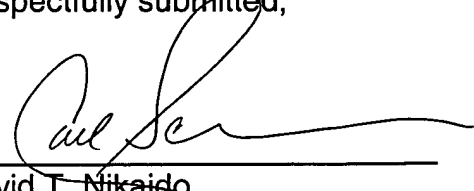
Also, claims 11-14 include features that further define amended claims that 1 and 6. Again, no new matter is being added even though amended claims 1 and 6 include language that is not recited verbatim in the specification. It is respectfully submitted that the newly-introduced claim language is acceptable particularly in light of the features illustrated in the drawing figures.

In view of the foregoing, reconsideration of the application and allowance of the pending claims are respectfully requested. Should the Examiner believe anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' representative at the telephone number listed below.

Should additional fees be necessary in connection with the filing of this paper or if a Petition for Extension of Time is required for timely acceptance of the same, the Commissioner is hereby authorized to charge Deposit Account No. 18-0013 for any such fees and Applicant(s) hereby petition for such extension of time.

Respectfully submitted,

Date: December 6, 2004

By: 
David T. Nikaido
Reg. No. 22,663

Carl Schaukowitch
Reg. No. 29,211

RADER, FISHMAN & GRAUER, P.L.L.C
1233 20th Street, N.W., Suite 501
Washington, D.C. 20036
Telephone: (202) 955-3750
Facsimile: (202) 955-3751
CUSTOMER 23353

Enclosure(s): Request for Continued Examination
 Amendment Transmittal
 Petition for Extension of Time (one month)

DC176150.DOC